**Technology for Learning K-12 (2013 – 2016)**



**Overview**

* Met with three different grade level groupings in April – May, 2013 (early years, middle years, high school)
* Each group consisted of teachers, support staff, administrators, IT personnel and Learning Services
* Purpose was to obtain information from the three groups about what technology resources would be most effective in the learning environment and share these recommendations to Senior Exec/Lead Team
* Background information shared with groups included review of PSD Vision, Mission and 4 Key Priorities, Ab Ed competency wheel, current educational technology resources/tools available in PSD, I.T. status on Evergreening and Infrastructure, Critical Thinking, review of Google Apps and eportfolio work.
* Questions asked of our participants – what technology should be in every classroom? What technology should be in the school? BYOD – what model makes sense?

**Technology in Action in PSD**

* Some participants were asked to share their technology integration experiences with the main group.

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| Grades K-4 | * BYOD in Muir Lake with grade 4s using Chromebooks – students learned about the specific pieces found within Google Docs, Presentation, apps, extensions, how to send a document to the teacher. They are now well-versed and see the benefits of 24/7 access to the internet, collaborative features. * iPads in Parkland Village – in each K-1 classroom, technology set up includes: smartboard, wireless headsets, FM system, Smart Doc camera, pod of 6 desktops, 5 iPads. In each grade 3-4 = 6 desktops, 6 wireless headsets, 10 laptops, SmartDoc camera, smartboard, FM system with chance to sign out iPads. Learning centres/stations assist in student engagement and motivation in the learning environment. * Stony Plain Central – grade 3 & 4 classes loving it, using PlayBooks daily. Students are able to use DocsToGo app to upload info and a picture prompt, send to Box (BB’s DropBox app) and email it to their teacher. |
| Grades 5-9 | * Sharing from Meridian Heights regarding Chromebook as a multi-user device by grades 7-9. Students were in-serviced first and saw the potential in their learning. Have 30 Chromebooks being used ALL the time, shared between three grade levels. * At Greystone, looking at iPads with pilots of 1:1, 1:2, 1:4, 1:5. Potential in 1:1 but not affordable for the school. All staff have an iPad which they use and allow students to use. Also, a Chromebooks cart is used ALL the time. Goal is to have access for students – 5 iPads in every classroom, specialized tech equipment for videoing, a Print Centre, etc. * Stony Plain Central – gr 7, 9, 3,4 classes trying out the BB PlayBook as a Blackberry and Android app device. Quick sign on, great access but finding more relevant learning opportunities in gr3/4 than in middle years. * BYOD in Muir Lake with Chromebooks – important to speak with students and parents about the purpose behind using technology. Not about the tool but about the student and learning environment. |
| Grades 10-12 | * English – used the PSD traveling iPad cart for 1:1 experience. Multiuser was not as effective – difficult to handle, movement of apps by students, frustrating for both teacher and students. * SPC and Muir Lake shared their experiences (same as above). |



**K-12 Classrooms**

* Recommendations of suggested technology tools available for teacher and student use in the classroom.

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| Kindergarten | - (center based), Smartboard, Tablets: 4 iPad Minis, Teacher Laptop, 4 student netbooks, 6 wireless headsets for Smartboard, FM system, iPods, microphone, webcam, Teacher iPad, connection from iPad to Projector (VGA or Apple TV), Listening Centre (USB Belkin) |
| Grade 1-2 | - Smartboard, Tablets: 12 iPads, Teacher Laptop, 4 student netbooks, 6 wireless headsets for Smartboard, FM system, Teacher iPad, Connection from iPad to Projector (VGA or Apple TV), Listening Centre (USB Belkin), webcam, microphone |
| Grade 3-4 | - Projector, Document Camera, Teacher Laptop, Teacher iPad, Connection from iPad to Projector (VGA or Apple TV), 1:1 set of Chromebooks or 1:2, Tablets: 6 iPads, webcam, microphone, FM system |
| Grade 5-6 | - Teacher laptop, projector, FM system, Document Camera or Apple TV/VGA cable, student access to (laptops/netbooks/iPads/Chromebooks), Camera device, Touch technology that is projected (Apple TV, iPad) Note: Goal is 1:1 BYOD |
| Grade 7-9 | - Teacher laptop, projector, FM system, Document Camera or Apple TV/VGA cable, student access to (laptops/netbooks/iPads/Chromebooks), Camera device, Touch technology that is projected projected (Apple TV, iPad)  note: Goal is 1:1 BYOD |
| Grade 10-12 | - Note: Goal is 1:1 BYOD, Teacher laptop, projector (HDMI-compatible), Apple TV, Teacher iPad, speakers (sound system), a pod of laptops (Chromebooks/laptops). <Possibility of a second display - using original projector with laptop and new HDMI projector with Apple TV/iPad.> |

**K-12 Schools**

* Recommendations of suggested technology tools available within the school.

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| K-4 | - Printer hubs/centres are still desired in close proximity to classrooms – laptop(s) with printer  - WiFi in every classroom  - Gym - WiFi, FM system  - Mobile carts of devices - class set (optional and site based as to type of device) |
| 5-9 | - CTF capable-devices: Chromebook/Laptop carts depending on purpose for access  - Printer hub centre  - Student devices (laptops/netbooks/iPads/Chromebooks) at school level stored in cart to supplement classroom tech, # used as needed |
| 10-12 | - power charging stations, Printer Hub centres in Learning Commons (school-owned laptops with printers) - push to less student printing, COWs (laptops/Chromebooks) by department |



**BYOD recommendations**

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| K-4 | - school/community choice. More possibility at the grade 4 level (process and protocol needs to be present, assistive tech for specialized needs) |
| 5-9 | Goal at this level is 1:1  - If students are bringing them, criteria:  *full function to GAFE (desktop version),*  *connects to internet,*  *word processing (paragraph+),*  *6 hour battery life,*  *ability to integrate images, video and sound*  *keyboard*  - suggested device: Chromebook, or laptop, netbook, macbook  - divisional initiative (consistency in device, function, teacher training – phased in process) |
| 10-12 | Same as 5-9, also Camera feature is important  Expect that students will be using multiple devices (ie. Smartphone and laptop) |

**Implications**

* Staff and student storage quotas to be set on network accounts
* Continued professional learning (GAFE, Blogging, Digital Citizenship, Depth of integration, digital classroom management)
* Parent awareness – ability for parents to connect with a vendor to purchase technology (lease/payment plan), understanding of online collaboration opportunities, information sessions/recorded videos (TED talk style) open for all parents (not school specific), benefits of student-owned technology in the classroom. Look at multiple means of communicating – via newsletter, video, meetings, demos.
* Student readiness – modeling, discussion, digital citizenship, device management
* Infrastructure – wireless access points in every classroom
* Evergreening – divisional initiative
* CTF/CTS considerations
* DIPs/PATs considerations